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10/808,043	03/24/2004	William P. Cook	2002-0711.02	5658

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EXAMINER	
MARTINEZ, CARLOS A	

ART UNIT	PAPER NUMBER
2853	

DATE MAILED: 08/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/808,043	COOK ET AL.	
	Examiner	Art Unit	
	Carlos A. Martinez	2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 June 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) *20-28* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☒ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *03/24/2004*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

Claims 20-28 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 06/28/2006.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Hirota (US7079685). Hirota teaches an optical scanner (refer to Fig. 2) for an electrophotographic device comprising: a laser configured to emit a laser beam (refer to lines 11-13 of column 4); laser optics (refer to element 301) arranged to sweep said laser beam along a non-ideal laser beam scan path (refer to lines 64-67 of column 4; and lines 1-7 of column 5); and scanner circuitry (refer to element 205) comprising: a first interface operatively configured to communicate with a controller in said electrophotographic device (refer to lines 8-18 of column 4; and lines 48-60 of column 29); and a memory device having stored thereon, data that characterizes said laser beam scan path, wherein said data is communicated to said controller through said first interface and said

electrophotographic device performs electronic compensation based upon said data (refer to lines 51-67 of column 26).

3. Claim 11 is rejected under 35 U.S.C. 102(e) as being anticipated by Hirota (US7079685). Hirota teaches an optical scanner (refer to Fig. 2) for an electrophotographic device comprising: a laser configured to emit a laser beam (refer to lines 11-13 of column 4); laser optics (refer to element 301) arranged to sweep said laser beam across an associated photoconductive surface of said electrophotographic device (refer to lines 11-13 of column 4; lines 64-67 of column 4; and lines 1-7 of column 5); and scanner circuitry (refer to element 205) comprising: a first interface operatively configured to communicate with a controller in said electrophotographic device (refer to lines 8-18 of column 4; and lines 48-60 of column 29); and a memory device having a plurality of storage locations thereon, wherein said controller reads operational parameters from said memory device for performing electronic compensation of non-ideal laser beam characteristics, and said controller writes operational parameters related to the operation of said electrophotographic device to said memory device using said first interface (refer to lines 51-67 of column 26; lines 1-50 of column 25; and lines 48-67 of column 29)

4. Claim 14 is rejected under 35 U.S.C. 102(e) as being anticipated by Hirota (US7079685). Hirota teaches an optical scanner (refer to Fig. 2) for an electrophotographic device comprising: a laser configured to emit a first laser beam and a second laser beam (refer to lines 11-13 of column 4); laser optics (refer to element 301) arranged to sweep said first laser beam across an associated photoconductive surface of said electrophotographic device (refer to lines 11-13 of

column 4; lines 64-67 of column 4; and lines 1-7 of column 5); a photodetector configured to measure the intensity of said second laser beam (refer to lines 8-19 of column 5; and lines 5-14 of column 27); and scanner circuitry (refer to element 205) comprising: a first interface operatively configured to communicate with a controller in said electrophotographic device (refer to lines 8-18 of column 4; and lines 48-60 of column 29); and a memory device having stored thereon, first data that characterizes laser beam power parameters based upon previous measurements taken by said photodetector, wherein said first data is communicated to said electrophotographic device through said first interface and said electrophotographic device performs electronic compensation based upon said first data (refer to lines 51-67 of column 26; lines 1-50 of column 25; lines 48-67 of column 29; and lines 5-14 of column 27).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirota (US7079685) in view of Kamisuwa (US6747766).

- Hirota fails to specifically mention where the data that characterizes said laser beam scan path comprises laser beam position measurements taken at a plurality of test points, wherein process direction position errors of said laser beam scan path may be electronically compensated by said controller. However, Kamisuwa teaches where

the data that characterizes said laser beam scan path comprises laser beam position measurements taken at a plurality of test points (refer to lines 30-42 of column 18), wherein process direction position errors of said laser beam scan path may be electronically compensated by said controller (refer to lines 45-52 of column 10).

- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify an optical scanner, as taught by Hirota, where the data that characterizes said laser beam scan path comprises laser beam position measurements taken at a plurality of test points, wherein process direction position errors of said laser beam scan path may be electronically compensated by said controller, as taught by Kamisuwa, for the purpose of providing measurement and compensation for position error as known to those skilled in the art.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirota (US7079685) in view of Kamisuwa (US6747766), as applied to claim 2 above, and further in view of Yoshino (US6342963).

- Hirota (in view of Kamisuwa) teaches a plurality of test points; however, Hirota (in view of Kamisuwa) fails to specifically mention where a scan direction measurement and a process direction measurement are taken. Yoshino teaches where a scan direction measurement and a process direction measurement are taken (refer to lines 9-67 of column 10).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify an optical scanner, as taught by Hirota (in view of

Kamisuwa), where a scan direction measurement and a process direction measurement are taken, as taught by Yoshino, for the purpose of providing measurement as known to those skilled in the art.

7. Claim 3 is also rejected under 35 U.S.C. 103(a) as being unpatentable over Hirota (US7079685) in view of Kamisuwa (US6747766), as applied to claim 2 above, and further in view of Schaefer (US20020130792).

- Hirota (in view of Kamisuwa) teaches a plurality of test points; however, Hirota (in view of Kamisuwa) fails to specifically mention where a scan direction measurement and a process direction measurement are taken. Schaefer teaches where a scan direction measurement and a process direction measurement are taken (refer to paragraph [0027]).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify an optical scanner, as taught by Hirota (in view of Kamisuwa), where a scan direction measurement and a process direction measurement are taken, as taught by Schaefer, for the purpose of providing measurement as known to those skilled in the art.

8. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirota (US7079685) in view of Kamisuwa (US6747766) and Yoshino (US6342963) or Schaefer (US20020130792), as applied to claim 3 above, and further in view of Yagi (US4975626).

- Hirota (in view of Kamisuwa and Yoshino or Schaefer) teaches a plurality of test points; however, Hirota (in view of Kamisuwa and Yoshino or Schaefer) fails to specifically mention a laser beam velocity measurement and where the laser beam scan path velocity nonlinearity may be compensated for by said controller. Yagi teaches a laser beam velocity measurement and where the laser beam scan path velocity nonlinearity may be compensated for by said controller (refer to lines 60-68 of column 3 and lines 1-37 of column 4).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify an optical scanner, as taught by Hirota (in view of Kamisuwa and Yoshino or Schaefer), with a laser beam velocity measurement and where the laser beam scan path velocity nonlinearity may be compensated for by said controller, as taught by Yagi, for the purpose of providing measurement of velocity as known to those skilled in the art.

9. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirota (US7079685) in view of Kamisuwa (US6747766) and Yoshino (US6342963) or Schaefer (US20020130792), as applied to claim 3 above, and further in view of Nakajima (US4932732).

- Hirota (in view of Kamisuwa and Yoshino or Schaefer) teaches a plurality of test points; however, Hirota (in view of Kamisuwa and Yoshino or Schaefer) fails to specifically mention a laser beam velocity measurement and where the laser beam scan path velocity nonlinearity may be compensated for by said controller. Nakajima teaches a laser beam velocity measurement and where the laser beam scan path

velocity nonlinearity may be compensated for by said controller (refer to lines 43-66 of column 9).

- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify an optical scanner, as taught by Hirota (in view of Kamisuwa and Yoshino or Schaefer), with a laser beam velocity measurement and where the laser beam scan path velocity nonlinearity may be compensated for by said controller, as taught by Nakajima, for the purpose of providing measurement of velocity as known to those skilled in the art.

With respect to claim 5, claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirota (US7079685) in view of Kamisuwa (US6747766) and Yoshino (US6342963) or Schaefer (US20020130792) and further in view of Nakajima (US4932732), as applied to claim 4 above.

- Hirota (in view of Kamisuwa and Yoshino or Schaefer) teaches a plurality of test points; however, Hirota (in view of Kamisuwa and Yoshino or Schaefer) fails to specifically mention where the laser optics comprises a rotating polygonal mirror and each of said laser beam velocity measurements comprises a measure of the angle of rotation of said rotating polygonal mirror (refer to lines 43-66 of column 9).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify an optical scanner, as taught by Hirota (in view of Kamisuwa and Yoshino or Schaefer), with a laser beam velocity measurement and where the laser beam scan path velocity nonlinearity may be compensated for by said

controller, as taught by Nakajima, for the purpose of providing measurement of velocity as known to those skilled in the art.

10. Claim 6 is also rejected under 35 U.S.C. 103(a) as being unpatentable over Hirota (US7079685) in view of Kamisuwa (US6747766) and Schaefer (US20020130792), as applied to claim 3 above, and further in view of Ogawa (US4602383).

- Hirota (in view of Kamisuwa and Schaefer) teaches where laser beam position measurements are stored on a memory device; however, Hirota (in view of Kamisuwa and Schaefer) fails to specifically mention where the scan direction measurements for each of said plurality of test points are encoded into a first vector and said process direction measurements for each of said plurality of test points are encoded into a second vector.
- Ogawa teaches where the scan direction measurements for each of said plurality of test points are encoded into a first vector and said process direction measurements for each of said plurality of test points are encoded into a second vector (refer to lines 48-68 of column 19; and lines 1-8 of column 20).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify an optical scanner, as taught by Hirota (in view of Kamisuwa and Schaefer), where the scan direction measurements for each of said plurality of test points are encoded into a first vector and said process direction measurements for each of said plurality of test points are encoded into a second

vector, as taught by Ogawa, for the purpose of providing memory encoding familiar to those skilled in the art.

11. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirota (US7079685) in view of Kamisuwa (US6747766), as applied to claim 2 above, and further in view of Ishigami (US5933184).

- Hirota (in view of Kamisuwa) teaches laser beam position measurements; however, Hirota (in view of Kamisuwa) fails to specifically mention measurements taken of said laser beam prior to said optical scanner being installed into said electrophotographic device.
- However, Ishigami teaches measurements taken of said laser beam prior to said optical scanner being installed into said electrophotographic device (refer to lines 46-61 of column 13).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify an optical scanner, as taught by Hirota (in view of Kamisuwa), measurements taken of said laser beam prior to said optical scanner being installed into said electrophotographic device, as taught by Ishigami, for the purpose of providing measurement of position as known to those skilled in the art before an optical scanner is installed for use.

12. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirota (US7079685) in view of Kamisuwa (US6747766), as applied to claim 2 above, and further in view of Hirayama (US4233612).

- Hirota (in view of Kamisuwa) teaches plurality of laser beam position measurements; however, Hirota (in view of Kamisuwa) fails to specifically mention measurements of a test laser beam that is not part of said optical scanner.
- However, Ishigami teaches measurements of a test laser beam that is not part of said optical scanner (refer to lines 51-68 of column 12; and lines 1-38 of column 13).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify an optical scanner, as taught by Hirota (in view of Kamisuwa), measurements of a test laser beam that is not part of said optical scanner, as taught by Hirayama, for the purpose of providing measurement of position as known to those skilled in the art using a laser not a part of an optical scanner.

13. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirota (US7079685), as applied to claim 1, in view of Foster (US6486906).

- Hirota teaches where the optical scanner comprises a plurality of lasers (refer to lines 8-18 of column 4), each laser associated with a corresponding color image plane (refer to Fig. 4B).
- Hirota fails to specifically mention where a plurality of laser beam position measurements comprises a plurality of laser beam position measurements for each of

said lasers. However, Foster teaches where a plurality of laser beam position measurements comprises a plurality of laser beam position measurements for each of said lasers (refer to lines 36-67 of column 4; and lines 1-13 of column 5).

- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify an optical scanner, as taught by Hirota, where the data that characterizes said laser beam scan path comprises laser beam position measurements taken at a plurality of test points, wherein process direction position errors of said laser beam scan path may be electronically compensated by said controller, as taught by Foster, for the purpose of providing measurement known to those skilled in the art for a plurality of lasers.

14. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirota (US7079685), as applied to claim 1 above, in view of Schrödinger (US6697401).

- Hirota teaches a scanner circuitry and an interface; however, Hirota fails to specifically mention a second interface, said first and second interfaces configured such that said electrophotographic device communicates memory data with said memory device using said first interface and said electrophotographic device communicates image data to be printed to said laser using said second interface.
- Schrödinger teaches a second interface, said first and second interfaces configured such that said electrophotographic device communicates memory data with said memory device using said first interface and said electrophotographic device

communicates image data to be printed to said laser using said second interface (refer to abstract).

- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify an optical scanner, as taught by Hirota, with a second interface, said first and second interfaces configured such that said electrophotographic device communicates memory data with said memory device using said first interface and said electrophotographic device communicates image data to be printed to said laser using said second interface, as taught by Schrödinger, for the purpose of providing printing control with memory as known to those skilled in the art.

15. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirota (US7079685), as applied to claim 11 above, and further in view of Omelchenko (US6657650) or Able (US6175375) or Parmigiani (US3575505).

- Hirota fails to specifically mention where the operational parameters comprise at least one of a measure of temperature within said electrophotographic device, an operational cycle count of a component within said electrophotographic device, and a power on time count of said electrophotographic device.
- Omelchenko teaches where the operational parameters comprise at least one of a measure of temperature within said electrophotographic device, an operational cycle count of a component within said electrophotographic device, and a power on time count of said electrophotographic device (refer to lines 25-39 of column 3). Also,

Able teaches where the operational parameters comprise at least one of a measure of temperature within said electrophotographic device, an operational cycle count of a component within said electrophotographic device, and a power on time count of said electrophotographic device (refer to lines 20-36 of column 17). Also, Parmigiani teaches where the operational parameters comprise at least one of a measure of temperature within said electrophotographic device, an operational cycle count of a component within said electrophotographic device, and a power on time count of said electrophotographic device (refer to abstract).

- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify an optical scanner, as taught by Hirota, where the operational parameters comprise at least one of a measure of temperature within said electrophotographic device, an operational cycle count of a component within said electrophotographic device, and a power on time count of said electrophotographic device, as taught by Omelchenko or Able or Parmigiani, for the purpose of providing operational parameters that are known to those skilled in the art.

16. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirota (US7079685), as applied to claim 11 above, and further in view of Hirst (US5491540) or LeSueur (US5272503).

- Hirota fails to specifically mention where the operational parameters comprise registration information that is typically stored by a controller in said electrophotographic device, which is mirrored to said memory device.

- Hirst teaches where the operational parameters comprise registration information that is typically stored by a controller in said electrophotographic device, which is mirrored to said memory device (refer to lines 3-20 of column 3). Also, LeSueur teaches where the operational parameters comprise registration information that is typically stored by a controller in said electrophotographic device, which is mirrored to said memory device (refer to abstract).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify an optical scanner, as taught by Hirota, where the operational parameters comprise registration information that is typically stored by a controller in said electrophotographic device, which is mirrored to said memory device, as taught by Hirst or LeSueur, for the purpose of providing a way to avoid the loss of operational parameters acquire by the electrophotographic device and for providing a storing of information known to those skilled in the art.

17. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirota (US7079685), as applied to claim 14 above, and further in view of Kusano (US5754576).

- Hirota fails to specifically mention where the laser beam power parameters comprise a measure of laser differential efficiency.
- Kusano teaches where the laser beam power parameters comprise a measure of laser differential efficiency (refer to abstract; and lines 21-41 of column 11).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify an optical scanner, as taught by Hirota, where the

laser beam power parameters comprise a measure of laser differential efficiency, as taught by Kusano, for the purpose of providing parameters for an optical scanner known to those skilled in the art.

18. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirota (US7079685), as applied to claim 14 above, and further in view of Ogino (US5061949) or Akagi (US6408013).

- Hirota fails to specifically mention where the laser beam power parameters comprise a measure of laser beam turn on current required for said laser to conduct laser energy.
- Ogino teaches where the laser beam power parameters comprise a measure of laser beam turn on current required for said laser to conduct laser energy (lines 51-63 of column 8). Akagi where the laser beam power parameters comprise a measure of laser beam turn on current required for said laser to conduct laser energy (lines 57-67 of column 4; and lines 1-20 of column 5).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify an optical scanner, as taught by Hirota, where the laser beam power parameters comprise a measure of laser beam turn on current required for said laser to conduct laser energy, as taught by Ogino or Akagi, for the purpose of providing parameters for an optical scanner known to those skilled in the art.

19. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirota (US7079685), as applied to claim 14 above, and further in view of Kusano (US5754576).

- Hirota fails to specifically mention where the laser beam power parameters comprise a measure of current supplied to said laser to achieve a predetermined level of spot power from said laser beam.
- Kusano teaches where the laser beam power parameters comprise a measure of current supplied to said laser to achieve a predetermined level of spot power from said laser beam (lines 23-47 of column 10; lines 32-44 of column 16; lines 65-67 of column 23; and lines 1-5 of column 24).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify an optical scanner, as taught by Hirota, where the laser beam power parameters comprise a measure of current supplied to said laser to achieve a predetermined level of spot power from said laser beam, as taught by Kusano, for the purpose of providing parameters in order to achieve a predetermined level of laser beam intensity for an optical scanner as known to those skilled in the art.

20. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirota (US7079685), as applied to claim 14 above, and further in view of Kusano (US5754576).

- Hirota fails to specifically mention where the laser beam power parameters comprise a constant that corresponds to a given change in input current to said laser to a change in spot power.

- Kusano teaches where the laser beam power parameters comprise a constant that corresponds to a given change in input current to said laser to a change in spot power (lines 44-67 of column 13; lines 1-27 of column 14; lines 65-67 of column 23; lines 1-5 of column 24; and lines 42-54 of column 3).
- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify an optical scanner, as taught by Hirota, laser beam power parameters comprise a constant that corresponds to a given change in input current to said laser to a change in spot power, as taught by Kusano, for the purpose of providing parameters such as the differential efficiency factor for an optical scanner as known to those skilled in the art.

21. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirota (US7079685) in view of Ream (US6363228).

- Hirota teaches an optical scanner (refer to Fig. 2) for an electrophotographic device comprising: a laser configured to emit a laser beam (refer to lines 11-13 of column 4); laser optics (refer to element 301) arranged to direct said laser beam towards an associated imaging medium of said electrophotographic device (refer to lines 11-13 of column 4; lines 64-67 of column 4; and lines 1-7 of column 5); and scanner circuitry (refer to element 205) comprising: a first interface operatively configured to communicate with a controller in said electrophotographic device (refer to lines 8-18 of column 4; and lines 48-60 of column 29); and a memory device having a plurality

of storage locations (refer to lines 51-67 of column 26; lines 1-50 of column 25; and lines 48-67 of column 29).

- However, Hirota fails to specifically mention where the memory has identification, history, and manufacturing sections wherein: said identification section comprises data stored therein that uniquely identifies said optical scanner; said history section comprises storage locations that can be written to and read by said electrophotographic device to store data related to operating parameters of said electrophotographic device; and said manufacturing section comprises data recorded in said memory device during manufacturing that characterizes said optical scanner such that said electrophotographic device implements adjustments to compensate for laser beam scan path characteristics unique to said optical scanner.
- Ream teaches where the memory has identification, history, and manufacturing sections wherein: said identification section comprises data stored therein that uniquely identifies said optical scanner; said history section comprises storage locations that can be written to and read by said electrophotographic device to store data related to operating parameters of said electrophotographic device; and said manufacturing section comprises data recorded in said memory device during manufacturing that characterizes said optical scanner such that said electrophotographic device implements adjustments to compensate for laser beam scan path characteristics unique to said optical scanner (refer to lines 51-67 of column 3; lines 1-65 of column 4; and lines 1-30 of column 5).

- Therefore, it would have been obvious to one having skill in the art at the time the invention was made to modify an optical scanner, as taught by Hirota, where the memory has identification, history, and manufacturing sections wherein: said identification section comprises data stored therein that uniquely identifies said optical scanner; said history section comprises storage locations that can be written to and read by said electrophotographic device to store data related to operating parameters of said electrophotographic device; and said manufacturing section comprises data recorded in said memory device during manufacturing that characterizes said optical scanner such that said electrophotographic device implements adjustments to compensate for laser beam scan path characteristics unique to said optical scanner, as taught by Ream, for the purpose of providing sections in memory for use in identification, operational parameters, and manufacturer's data as known to those skilled in the art.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos A. Martinez whose telephone number is (571) 272-8349. The examiner can normally be reached on 8:30 am - 5:00 pm (M-F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, STEPHEN D. MEIER can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CAM
08/17/2006

HAI PHAM
PRIMARY EXAMINER